HOW TO CURE WRITERS' CRAMP.

Remedies Recommended For Contraction of the Finger Muscles.

Writers' cramp consists of a spasmodic contraction of the muscles of the thumb and fingers, rendering them stiff and useless and causing in some cases a considerable amount of pain. It comes on gradually, rarely affecting those in robust health, but usually attacking nervous and excitable persons. As soon as the person affected stops writing the cramp ceases, but returns as soon as he again attempts it. People suffering from this trouble try to effect a cure by moving the wrist and forearm in writing when it extends to these muscles. The left hand is often brought into use, but after a short time becomes similarly affected. Strenuous efforts are often made when the cramp sets in to overcome it by muscular effort, and sometimes the person is able to write for a few moments, but the result is a miserable specimen of penmanship and is often illegible. In a short time, however, even the power to hold the pen becomes impossible.

The disease is unknown in childhood, seldom coming on before the twenty-fifth year, affecting men more frequently than women. Writing with pencils or the stylographic pen is not liable to produce writers' cramp as in the sharp pointed steel pen, the reason being that there is less resistance. Tobacco and alcohol in excess are said to be causative agents. There is also a certain hereditary tendency to cramp. Injuries to the fingers and arm sometimes act as predisposing causes.

As regards prevention, a soft stub pen, smooth paper, a desk of convenient height, with ample room to allow the arm full swing, loose sleeves, using the muscles of the arm to form the letters, changing the manner of holding the pen, using the typewriter, etc., all form important factors in preventing the disease, especially in those who experience such premonitory symptoms as slight weakness of the muscles, slight pain and sudden contractions and spasms of the fingers. The best and quickest results may be obtained by the use of electricity, massage and gymnastics. Absolute rest, tonic treatment and change of climate are advisable. When all methods fail, the only alternative is to change one's occupation, that the muscles may have no cause for spasmodic contraction.

How Satin Was Discovered.

A century ago a silk weaver named Octavio Mai during a dull period of business was one day pacing before his loom, not knowing how to give a new impulse to his trade. Every time he passed the machine he meditatively pulled little threads from the warp and put them in his mouth, spitting them out soon after. Later he observed a little ball of silk upon the floor of the shop and was astonished at the brilliancy of the threads. Upon repeating the experiment and eventually employing various mucilaginous preparations he succeeded in giving satin to the world.

How to Take Care of Fuchsias.

Fuchsias can be grown from cuttings. Plant them in sand and keep constantly wet whether in sun or shade. Shoots will start in about 10 days, and roots will be formed. Put the little plants in small pots in soil composed of decayed leaf mold, sand and loam. These plants need a rich, light, porous soil. Keep the plants in a partially shaded place and well moistened. Liquid fertilizer may be given from time to time. Shower the leaves often. This and a shady place are especially good for fuchsias. They can be wintered in the cellar, where they will drop their leaves, but will start new growths in the spring. Shift the plants before they become pot bound. Fertilize twice a week when they are in bud. When set outdoors, put them in a shady place.

How to Bronze Plaster Casts.

Dissolve in a pint of hot water an ounce of sal ammoniac, 3 ounces cream tartar and 6 of common salt; then add 2 ounces of copper nitrate in another pint of hot water. Apply with a brush.

How to Make the Famous Dark Chocolate Cake.

Take 2 squares of chocolate, the yolk of an egg and a half cup of sweet milk. Put this mixture on the stove and stir until it is moderately thickened, then add a cup of sugar, a piece of butter the size of an egg, one-half cup of sweet milk, 1½ cups of flour, a heaping teaspoonful of soda and 2 of cream of tartar. Bake in layers.

How to Detect Hard Water.

To a glassful add a few drops of a solution made of soap and alcohol. If white flakes are formed, the water is hard; if it remains clear, it is all right.

FRENCH POLICE SPIES.

How the Government Manages to Secure Information Privately.

After all that has been said about the vileness of the police system under the empire, which rendered it almost impossible for any one to be safe from espionage, even in private life, it might well be supposed that the republic had done away with this machinery for discovering and weaving plots so much more suited to the age of Louis XI than to the nineteenth century. It remains, however, very much what it was 30 years ago. These things do not change in France.

Governments go, and the forms of government, and these are succeeded by others, but the good old abuses—they must be thought good by some people—cling to the ship with barnaclelike tenacity. French official organization is about the most steadfast thing in the world, although all French people to whom you may speak on the subject agree that it is very bad. It is almost as difficult now as it was under the empire to be certain that a man whom you may meet, either in society or out of it, does not belong to the secret police.

All over the country there are mouchards—a term expressing something stronger than spies. I have been inconvenienced by them myself in the provinces. On one occasion I made a rather long stay in a little place where there were two hotels in fierce rivalry. One day a brigadier of gendarmes came over from a neighboring town on purpose to make inquiries respecting me.

He did not trouble me, but he questioned various people as to how I passed my time, about how much I spent a day, what sort of meals I had, and whether I appeared to have more money than I knew what to do with. The fact was I was suspected of being a spy in the pay of a foreign government. As I consider a bold front to be the best whenever there is anything of this kind in the air, I got myself driven over the gendarmery, which was about eight miles off, and there had it out with the brave brigadier.

I soon discovered that an informer had been at work and that the informer was no other than the keeper of the rival hotel, who for years had been receiving pay as a member of the secret police. Situated where he was he must have been absolutely useless in that capacity, but at one time he must have done a service to somebody.

It is especially in Paris, however, that that the secret police is supposed to be indispensable. Every government wishes to be kept well informed as to all that goes on in an enemy's camp. Such information can only be obtained from those who are willing to play the part of a traitor or whose position enables them to observe what is going forward without exciting suspicion. They are technically termed "indicators" and may belong to either sex. When the Boulangist movement was convulsing France, the government had a great advantage over its opponents by handling of the secret fund and the secret police.

Boulanger's footsteps were dogged everywhere, and somehow M. Constans learned all that he wished to know concerning the plans and doings of the conspirators. An important point in this system is to make the "indicator" feel sure that whatever happens he will not be betrayed. The minister of the interior or of justice never asks the names of those by means of whose espionage certain political information has been gathered.

The money given for dark services is paid from hand to hand in cafes or other nonofficial places by commissionnaires, and the name of no auxiliary outside of the ranks of the regular police ever appears in a book. Is it impossible for the government to do without this abominable system, so opposed to the ideal of a democratic state? The Cottu-Soinoury scandal has led to much discussion on this question.—Boston Transcript.

An Obtuse Englishman.

A Mr. Kirbell, who had never been out of England until he went to Vienna, seems to have been a typical Briton and stubbornly insular to the extent of refusing to alter the time of his watch as he traveled eastward from England. No argument would induce him to budge, and when at Vienna he arose at unearthly hours and perambulated around the city alone, having persisted in being guided by his watch, stoutly asserting that the foreign clocks were all wrong.

Kirbell was very anxious also to keep a record of all the places he visited and always jotted down in his pocketbook the names of the various stations he had stopped at or passed. "How curious it is there are so many stations of the same name," he once remarked to a fellow passenger, who replied that he had not observed it. Kirbell then showed his record to prove he was right, and, sure enough, over and over again occurred the word "Ausgang" (Exit), which he had confidently entered as the name of many stations passed on the route.—San Francisco Argonaut.

Standards of Measurement.

The "foot" is named from the length of that member in a full grown man. Some say that it was so called from the length of the foot of a certain English king, but it is believed to have been a standard of measurement among the ancient Egyptians.

The cubit is from the Latin cubitus, an elbow, and is the distance from the elbow to the end of the middle finger.

Fathom is from the Aryan, fat, to extend, and denotes the distance from tip to tip of the fingers, when the arms of an average sized man are fully extended.—St. Louis Republic.

Letters of Introduction.

In writing a letter of introduction care should be taken that no requests are made that will involve the recipient in any trouble. Remember that social attentions are not always easy to render, and therefore the letter should entail only minor courtesies not apt to put any one to any inconvenience.—Philadelphia Times.

HIGHWAY DRAINAGE.

Information Concerning the Forms and Location of Under Drains.

There is no fixed rule for the construction of under drains, says L. B. Potter in Good Roads. The primary object of this form of drain is to provide an underground channel which shall invite and carry off the surplus water which saturates the surrounding earth above the level of the drain. Any form of under drain which permanently accomplishes this result is good, and a drain that is not permanently good might better have been left unmade. To construct a good drain requires no elaborate outfit, and the common sense selection and use of materials found in most neighborhoods will generally suffice.

Draintile should be used if possible. It is cheap, plentiful and makes a permanent and substantial drain, insures an ample, uniform and constant channel for the flood of water and is far and away the best channel for ordinary road drainage that has yet come into common use.

In the matter of size a draintile having an inner diameter of 3 or 4 inches will generally be sufficient for the under drainage of a 30-foot roadway and in many soils of even a greater width. A greater diameter may always be used to advantage, and a 6-inch pipe is none too large to improve the condition of the roadway, since the larger pipe invites the entrance of warm air in spring and quickens the thawing of the frost and the drying of the earth which surrounds the pipe.

Draintiles should be carefully laid, and since this work is designed to be lasting and is always troublesome to repair it is best at the outset to give due attention to the work of making it permanent.

There is a variety of methods followed by different authorities in the making of tile drains, and most of them are good and none positively bad. It is idle to take sides in a controversy which serves no good end and settles no important difference. Tiles should be laid true to grade, evenly and substantially supported by the soil beneath and at the sides and covered in such manner as to prevent the introduction of silt, mud and other foreign substances into the interior of the pipe.

This is accomplished in most cases by a layer of straw or coarse marsh grass, over which is carefully placed a considerable depth of rubble or field stone and the whole topped off with a material composing the macadam surface. Sometimes the rubble or field stone is placed in direct contact with the pipe, being carefully laid against it on either side to support it in constant position, while at the top of the stone layer is placed a compact layer of sod, which serves to prevent the passage of earth through the loose stone and into the channel of the pipe.

CROSS SECTION OF ROAD AND DRAIN.

But excellent drains are often made without the use of draintile, and where tile cannot be readily obtained other methods may be substituted with advantage. In stiff, firm soils drainage has been very well effected by simply digging a uniform ditch of the proper depth, form and grade and filling it to a depth of two or three feet at the bottom with irregular bowlders and rough field stone of such size and shape as to insure a loose, open structure through which the water will readily pass. Over this is placed a layer of sod, straw or coarse marsh grass and the top finally completed with the material which forms the roadway surface.

A somewhat more elaborate yet vastly more efficient form of drain can be made by the use of rough stones and consists in the selection of flattened stones of a moderately uniform size and so laid at the bottom of the trench that the edges of adjacent stones rest against each other so as to form an angular opening through which the water may pass, as in the case of a draintile. The bottom or channel stones are then covered with coarse rubble or field stones, over which is placed the usual layer of sod, straw or coarse marsh grass, and the trench is then filled to the top with earth conveniently at hand.

Help From the Railroads.

A few of the railroad companies have definitely offered free transportation of materials for the construction of public roads. This could not be asked, of course, from the companies generally. But if they would take the matter into consideration as one of vital importance, in view of the fact that railroad transportation will be necessary for a great share of the materials used for road improvement, and establish such rates for road materials as they can well afford (regarding the same as a contribution on their part and proportionate to their interest) they would do more to promote the early success of road reform than can be done by any other agency in the country or by all others combined.

Legislators Slow to Act.

The agitation for the better roads has not yet accomplished its purpose in educating public opinion up to the stage of demanding improved highways in tones that our legislature will not presume to disregard. In the meantime some educational work can be done by individual townships improving the highways within their boundaries, but road improvement on a system needs a larger field and a freer scope. This cannot be obtained until we secure the necessary legislation.—Philadelphia Press.

The Roads of Georgia.

Georgia ought to take the liveliest interest in the subject of road reform, for she is cursed with bad roads and a thoroughly inadequate and wretched public road system.—Columbus Enquirer-Sun.

Old Time Cures.

In mediæval times if a child did not learn to walk with readiness the wise wizard would direct it to creep through a blackberry bush which had the canes bent down to the earth and rooted by their tips. At the present it would be as pleasant and efficacious for the tardy toddler to creep among a few barbed wire fences, and it would be more in keeping with the keen spirit of this age of wire.

One of the leading sources of income to the old herbalist was the compounding of love powders for despondent swains and heartsick maidens. If a powder would not bring the desired relief, various juices of roots and herbs were mingled in a potion and sold as the love phial. Here is an old recipe: "Mistletoe berries (not exceeding nine in number) are steeped in an equal mixture of wine, beer, vinegar and honey.

"This taken on an empty stomach before going to bed will cause dreams of your future destiny (provided you retire before 12 o'clock) either on Christmas eve or on the first and third of a new moon." Perhaps as a lingering remnant of this absurdity there is a current notion in some parts of the world today that a whole mince pie eaten at midnight will cause the reappearance of long departed friends, not to mention the family physician and the more interested members of the household.—Chautauquan.

Getting on a Street Car.

Did you ever notice a man who is going to get on a street car while it is in motion? He comes down off the sidewalk and stands along the side of the track quietly till the car almost reaches him. Then he walks ahead a few feet and prances about like a string haltered horse, awkward as a Shanghai rooster that wants to fight. Just as the car reaches him he takes two or three steps sideways, and at last, confused as a schoolboy, grasps the hand rail and clings on like a man who is drowning.—Colorado Sun.

A Matter of Time.

Wagleigh—How did you like that dinner service I sent you today, dear?

Mrs. Wagleigh—Oh, it is perfectly lovely, but there are only 91 pieces in it, and you know the set mamma has consists of 117 pieces.

Wagleigh—Well, dear, don't let that worry you. After Bridget has handled it for a week or so it will be in a good many more pieces than that.—Exchange.

Only One Week.

"Did you know dis is mamma's birfday?" asked little Bessie of the caller.

"No. Is it?"

"Yes, and my birfday is next Monday. Mamma is a week older dan me."—Harper's Bazar.

Turkey's Formidable Guns.

In 1478 Mohammed II, in forming the siege of Scutari in Albania, employed 14 heavy bombards, the lightest of which threw a stone shot of 370 pounds weight, two sent shots of 500 pounds, one of 750 pounds, two of 850 pounds, one of 1,200 pounds, five of 1,500 and one of the enormous weight of 1,640 pounds, enormous even in these days, for the only guns whose shots exceed the heaviest of these are our 80 ton guns, throwing a 1,700 pound projectile, our 100 ton, throwing one of 2,000 pounds, and the 110 ton, throwing an 1,800 pound shot with a high velocity.

The stone shot of Mohammed's guns varied between 20 and 32 inches in diameter, about the height of a dining table; 2,534 of them fired on this occasion weighing, according to a calculation of General Lefroy's, about 1,000 tons and were cut out of the solid rock on the spot. Assuming 24 inches as the average diameter of the shot fired at the siege, the total area of the surface dressed was nearly 32,000 square feet. At this siege the weight of the powder fired is estimated by General Lefroy to have been 250 tons. At the siege of Rhodes in 1480 Mohammed caused 16 basilisks or double cannon to be cast on the spot, throwing balls 2 to 3 feet in diameter.—Chambers' Journal.

Genealogical Item.

Fraulein Knickerbocker—Your genealogical tree has many serious gaps in it. Thus I find there is no mention made of a great-grandmother on the father's side.

Fraulein Half Shoddy—Ah! you see, my great-grandfather was a confirmed bachelor.—Staats Zeitung.

A Pleasant Outlook.

Young Tutter—I suppose, Miss Clara, you expect to be settled in your new home in New Jersey very soon?

Miss Pinkerly—We hope to be, Mr. Tutter, and I trust you will run out and see us.

Young Tutter—Thanks. What was your father's idea in getting away from town?

Miss Pinkerly—He said he wanted to live in a place where he could keep a big dog.—Jersey Homes.

Remember that proper cultivation and use of the voice not only add to its beauty, but prevent it from becoming prematurely old, worn and cracked.

The largest cut stones in the world are in the Temple of the Sun at Baalbec. Many are more than 60 feet long, 20 feet broad and of unknown depth.